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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/824,837

04/02/2001

Amit Phadnis

CSCO-004/95507

1175

26392

7590

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EXAMINER

VINCENT, DAVID ROBERT

ART UNIT

PAPER NUMBER

2661

DATE MAILED: 03/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/824,837

Applicant(s)

PHADNIS ET AL.

Examiner

David R Vincent

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11/22/04.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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***Response to Amendment***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the layer-3 header, which identifies the tunnel, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required

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corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Response to Amendment***

The applicant added a limitation specifying that e.g., a Layer-3 header identifies the tunnel.

However, it appears that the applicant's admitted prior art will read on this (see applicant's specification, pg. 12, lines 12-14). Meaning this newly added limitation is clearly not a point of novelty.

***Response to Arguments***

2. Applicant's arguments with respect to claims 1-32 have been considered but are moot in view of the new ground(s) of rejection.

In re pg. 19, the applicant argues the references do not appear to set the TOS or Precedence field of the UDP/IP packet.

In response, Troxel does disclose using UDP over IP (see e.g., Fig. 4 and respective disclosure, e.g., col. 5, lines 17-30). Also, the applied art does not disclose changing the QoS (TOS) in midstream. Meaning, once a connection is negotiated and accepted for a particular QoS, the QoS remains the same all the way from source to destination. For example if the data were voice and the connection was granted then it is assumed that the voice data will not experience excessive delays nor

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will any intermediate nodes (makes not difference whether they are labeled as routers, switches or gateways) be allowed to go and change the QoS of the packets belonging to a stream randomly. However, Troxel does clearly disclose setting the copying and setting the QoS/TOS (e.g., at col. 8, lines 1-14; col. 10, line 63-col. 11, line 32) and setting up tunnels. Clearly since Troxel does disclose IP over ATM (e.g., col. 13, lines 1-9) and ATM includes notoriously well known QoS parameters. The QoS will remain intact from source to destination. This means that the TOS will be copied at any intermediate nodes along the way to make sure that the QoS remains the same as what was negotiated. Furthermore, Kohzuki teaches copying the TOS from IP into ATM (Kohzuki: e.g., section 188, 199).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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Claims 1-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Troxel and Kohzuki in view of Sakamoto (US 2004/0008706).

The newly added claims are rejected under the same reasoning as claims 1-32.

Sakamoto teaches the newly added limitation of Layer-3 header identifying the tunnel (e.g., 263, Fig. 10 and respective disclosure), as well as more clearly relating the IP TOS to the ATM QoS (e.g., Figs. 8-9, 13, 15 17-19, especially Fig. 15).

Therefore it would have been obvious to one of ordinary skill in the art, having both the combination of Troxel and Kohzuki and Sakamoto before him/her and with the teachings [a] as shown in the combination of Troxel and Kohzuki, that it is well known to set up layer-3 tunnels (IP or IP-to-IP, Troxel: col. 10, lines 35-49) and to run UDP (at layer-4) over IP (at layer-3) over ATM and to copy the TOS (from IP into e.g., ATM, Kohzuki: section 188, 199) and [b] as shown in Sakamoto, that tunnels can be more clearly labeled as tunnels and can even receive their own header or identification in a layer-3 header (Sakamoto: Fig. 10), and also run IP with QoS over ATM (Sakamoto: Fig. 8-9, and 15), to modify the IP-IP tunnel of Troxel to conform to the RFC 1853 (by having the layer-3 header more clearly identify a tunnel) for the purposes of conformity

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and to be able to send packets along more networks with less processing, and because both Troxel and Sakamoto are using IP over ATM with a LLC/SNAP header. Also Sakamoto makes it clearer that there can be a direct relationship between IP TOS and ATM QoS (Fig. 15).

### ***Conclusion***

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to David R Vincent whose telephone number is 571 272 3080. The examiner can normally be reached on M-TH.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 571 272 3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
David R Vincent  
Primary Examiner  
Art Unit 2661

March 2, 2005